

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In Re Application of:

Brian R. Murphy et al.

Serial No.: 09/733,692

Filing Date: December 8, 2000

For: USE OF RECOMBINANT PARAINFLUENZA VIRUSES (PIVS) AS VECTORS
TO PROTECT AGAINST INFECTION AND DISEASE CAUSED BY PIV AND
OTHER HUMAN PATHOGENS

Group Art Unit: 1632

Examiner: Not Assigned

DATE OF DEPOSIT: 4/12/2002

I HEREBY CERTIFY THAT THIS PAPER IS BEING
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PATENTS AND TRADEMARKS, WASHINGTON, DC,
20231.

TYPED NAME: Jeffrey J. King
REGISTRATION NO. 38,515

BOX DSD
Commissioner for Patents
Washington, DC 20231

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ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION
AND
REVOCATION AND POWER OF ATTORNEY

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee").
The original assignment was recorded in the United States Patent and Trademark Office on
June 7, 2001 at Reel 012151, Frame 0768. A copy of the Assignment is attached. This
Assignment represents the entire chain of title of this invention from the Inventors Brian R.
Murphy; Peter L. Collins; Alexander C. Schmidt; Anna P. Durbin; Mario H. Skiadopoulos; and
Tao Tao to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the below listed registrants of National Institutes of Health Offices of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852, telephone (301) 496-7056, as its agents and attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his/her/their attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

<u>James C. Haight</u>	Reg. No. <u>25,588</u>
<u>David R. Sadowski</u>	Reg. No. <u>32,808</u>
<u>Jack Spiegel</u>	Reg. No. <u>34,477</u>
<u>Susan S. Rucker</u>	Reg. No. <u>35,762</u>
<u>Stephen Finley</u>	Reg. No. <u>36,357</u>
<u>Steven Ferguson</u>	Reg. No. <u>38,488</u>
<u>John Peter Kim</u>	Reg. No. <u>38,514</u>
<u>Norbert Pontzer</u>	Reg. No. <u>40,777</u>
<u>Richard U. Rodriguez</u>	Reg. No. <u>45,980</u>
<u>Marlene Shinn</u>	Reg. No. <u>46,005</u>
<u>Dale Berkley</u>	Reg. No. <u>32,319</u>
<u>Catherine M. Joyce</u>	Reg. No. <u>40,668</u>

The National Institutes of Health Office of Technology Transfer has been duly delegated responsibility for such patent matters under the authority of the Department of Health and Human Services Secretary Louis W. Sullivan's May 21, 1991, memorandum appearing in the Friday, June 7, 1991, Federal Register Notices at Vol. 56, No. 110, pp. 26418-26419. The undersigned is authorized to exercise such authority in this matter.

Done on this 11 day of MARCH, 2002, at Rockville, Maryland.

UNITED STATES DEPARTMENT OF HEALTH
AND HUMAN SERVICES

By: Jack Spiegel
Printed Name: JACK SPIEGEL
Registration No.: 34,477

for: Dr. Jack Spiegel, Director, DDT
Office of Technology Transfer
National Institutes of Health
6011 Executive Boulevard, Suite 325
Rockville, MD 20852
Telephone (301) 496-7056
Facsimile (301) 402-0220

DHHS CASE NO. E-099-99/1

NOVEMBER 20, 2001

PTAS

TOWNSEND AND TOWNSEND AND CREW LLP
BRIAN W. POOR
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO, CALIFORNIA 94111-3834

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/07/2001

REEL/FRAME: 012151/0768
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
MURPHY, BRIAN R.

DOC DATE: 04/09/2001

ASSIGNOR:
COLLINS, PETER L.

DOC DATE: 04/09/2001

ASSIGNOR:
SCHMIDT, ALEXANDER C.

DOC DATE: 04/09/2001

ASSIGNOR:
DURBIN, ANNA P.

DOC DATE: 04/16/2001

ASSIGNOR:
SKIADOPOULOS, MARIO H.

DOC DATE: 04/09/2001

ASSIGNOR:
TAO, TAO

DOC DATE: 04/09/2001

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TECH CENTER 1600/2900

012151/0768 PAGE 2

ASSIGNEE:

HEALTH AND HUMAN SERVICES,
GOVERNMENT OF THE UNITED STATES
OF AMERICA, THE, AS REPRESENTED
BY THE SECRETARY OF THE
DEPARTMENT OF
6011 EXECUTIVE BOULEVARD, SUITE
325
NATIONAL INSTITUTES OF HEALTH
ROCKVILLE, MARYLAND 20852-3804

SERIAL NUMBER: 09733692

PATENT NUMBER:

FILING DATE: 12/08/2000

ISSUE DATE:

ALLYSON PURNELL, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

09-17-2001

Attorney Docket No. 15280-404100US

Form PTO-1595

(Rev. 03-01)

OMB No. 0651-0027 (exp. 5/31/2002)



eet

U.S. Department of Commerce
U.S. Patent and Trademark Office

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Tab settings ⇐ ⇐ ⇐ ▼ ▼ ▼ ▼

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

Brian R. Murphy
Peter L. Collins
Alexander C. Schmidt
Anna P. Durbin
Mario H. Skiadopoulos
Tao Tao*19/1/01*
*10/1/01*Additional name(s) of conveying parties attached? ☐ Yes ☒ No.

3. Nature of conveyance:

- ☒
- Assignment
- ☐
- Merger
-
- ☐
- Security Agreement
- ☐
- Change of Name
-
- ☐
- Other: _____

Execution Date: April 9th and 16th 2001

2. Name and address of receiving party(ies)

Name: The Government of the United States of America, as represented by the Secretary of the Department of Health and Human ServicesStreet Address: National Institutes of Health, 6011 Executive Boulevard, Suite 325City: Rockville State: Maryland ZIP: 20852-3804Additional names and addresses attached? ☐ Yes ☒ No**RECEIVED**

SEP 10

APR 17 2002

TECH CENTER 1600/2900

4. Application number(s) or patent number(s).

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No(s): 09/733,692

B. Patent No(s): _____

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Brian W. Poor
TOWNSEND AND TOWNSEND AND CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(206) 467-9600

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): -----\$40.00☐ Enclosed☒ Authorized to be charged to deposit account8. Deposit account number: 20-1430

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the original document.*Brian W. PoorName of Person Signing
Atty. Reg. No. 32,928*Brian W. Poor*

Signature

5 Sept 10 2001

Date

Total number of pages including cover sheet, attachments and document 6

Mail documents to be recorded with required cover to:
Commissioner of Patents and Trademarks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT

JOINT

WHEREAS, We, **Brian R. Murphy**, of 5410 Tuscarawas Road, Bethesda, MD 20816; **Peter L. Collins**, of 12304 Village Square, #401, Rockville, MD 20852; **Alexander C. Schmidt**, of 1831 Belmont Road #203 NW, Washington, DC 20009; **Anna P. Durbin**, of 806 Hudson Avenue, Takoma Park, MD 20912; **Mario H. Skiadopoulos**, of 8303 Aqueduct Road, Potomac, MD 20854; **Tao Tao**, of 10684 Weymouth Street, #104, Bethesda, MD 20814, hereinafter referred to as "Assignors," employees of the Department of Health and Human Services at the time the invention was made, have invented: **USE OF RECOMBINANT PARAINFLUENZA VIRUSES (PIVs) AS VECTORS TO PROTECT AGAINST INFECTION AND DISEASE CAUSED BY PIV AND OTHER HUMAN PATHOGENS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☒ is identified as U.S. Patent Application:
Serial No. 09/733,692

Filed December 8, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter **THE GOVERNMENT**), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which **THE GOVERNMENT** elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to **THE GOVERNMENT** as assignee of the entire right, title, and interest in and to the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which **THE GOVERNMENT** elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:

4/9/01

Brian R. Murphy
Brian R. Murphy

STATE OF MARYLAND)
)
COUNTY OF MONTGOMERY)

ss.

UNITED STATES OF AMERICA

On April 9, 2001, before me, Margaret L. Tomczak (name of notary public), personally appeared Brian R. Murphy, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Margaret L. Tomczak
NOTARY PUBLIC
My Commission Expires: _____

MY COMMISSION EXPIRES
MARCH 1, 2003
MARGARET L. TOMCZAK
NOTARY PUBLIC

Dated: 4/9/01

Peter L. Collins

Peter L. Collins

STATE OF MARYLAND)
COUNTY OF MONTGOMERY) ss.
UNITED STATES OF AMERICA

On April 9, 2001, before me, Margaret L. Tomczak (name of notary public), personally appeared Peter L. Collins, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Margaret L. Tomczak

NOTARY PUBLIC

My Commission Expires: _____

MY COMMISSION EXPIRES

MARCH 1, 2003

MARGARET L. TOMCZAK
NOTARY PUBLIC

Dated: 4/9/01

Alexander C. Schmidt

Alexander C. Schmidt

STATE OF MARYLAND)
COUNTY OF MONTGOMERY) ss.
UNITED STATES OF AMERICA

On April 9, 2001, before me, Margaret L. Tomczak (name of notary public), personally appeared Alexander C. Schmidt, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Margaret L. Tomczak

NOTARY PUBLIC

My Commission Expires: _____

MY COMMISSION EXPIRES

MARCH 1, 2003

MARGARET L. TOMCZAK
NOTARY PUBLIC

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APR 17 2002

Dated: 4/16/01

Anna P. Durbin
Anna P. Durbin

TECH CENTER 1600/2900

STATE OF MARYLAND)

COUNTY OF Baltimore)

ss.

UNITED STATES OF AMERICA

On 4/16/01, before me, Arlene Bloom (name of notary public), personally appeared Anna P. Durbin, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Arlene Bloom
NOTARY PUBLIC
My Commission Expires: Nov 1, 2004

Dated: 04/09/01

Mario H. Skiadopolous
Mario H. Skiadopolous

STATE OF MARYLAND)

COUNTY OF MONTGOMERY)

ss.

UNITED STATES OF AMERICA

On April 9, 2001, before me, Margaret L. Tomczak (name of notary public), personally appeared Mario H. Skiadopolous, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Margaret L. Tomczak
NOTARY PUBLIC
My Commission Expires: _____

MY COMMISSION EXPIRES
MARCH 1, 2003
MARGARET L. TOMCZAK
NOTARY PUBLIC

Dated: 2/19/2001

Tao Tao

STATE OF MARYLAND)

COUNTY OF MONTGOMERY)

ss.

UNITED STATES OF AMERICA

On April 19, 2001, before me, Margaret L. Tomczak (name of notary public), personally appeared Tao Tao, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Margaret L. Tomczak
NOTARY PUBLIC

My Commission Expires: March 1, 2003

MY COMMISSION EXPIRES
MARCH 1, 2003
MARGARET L. TOMCZAK
NOTARY PUBLIC

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In Re Application of:

Brian R. Murphy et al.

Serial No.: 09/733,692

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PROTECT AGAINST INFECTION AND DISEASE CAUSED BY PIV AND OTHER
HUMAN PATHOGENS

Commissioner for Patents
Washington, DC 20231

ASSOCIATE POWER OF ATTORNEY

Sir:

The undersigned attorney of record, pursuant to the provisions of 37 C.F.R. §§ 1.33 and 1.34, and M.P.E.P. §402.02, hereby appoints the registrants of Woodcock Washburn LLP, One Liberty Place, 46th Floor, Philadelphia, Pennsylvania 19103, telephone (215) 568-3100, as its agents and attorneys to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith.

Done on this 11 day of MARCH, 2002, at Rockville, Maryland.

UNITED STATES DEPARTMENT OF HEALTH
AND HUMAN SERVICES

By: Jack SpiegelPrinted Name: JACK SPIEGELRegistration No.: 34477

for: Dr. Jack Spiegel, Director, OTDT
Office of Technology Transfer
National Institutes of Health
6011 Executive Boulevard, Suite 325
Rockville, MD 20852
Telephone (301) 496-7056
Facsimile (301) 402-0220

DHHS CASE NO.: E-099-99/1

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